CLAIMS

1. An electronic control cell for at least one organic light-emitting diode (OLED) of a pixel or segment of an active matrix display, the cell including at least :

- one control circuit (61, 62) with a control input and operating as an electronic switch relative to a control signal arriving at a control line (5, 5') on the control input and enabling to turn on the OLED(s) or not, relative to said control signal,
- one capacitive storage circuit of the control signal with a capacitor C connected to the control line,
- one selection circuit (41, 42) operating as an electronic switch relative to a selection signal V_{sel} arriving at a selection line (3, 3') and enabling electrical connection or insulation of the capacitive storage circuit with/from a control voltage V_{com} (2) relative to said selection signal,

characterised in that the storage is temporary by discharging the capacitor through a resistor Rf parallel to the capacitor.

2. A cell according to claim 1, characterised in that the capacitor C is substantially an added-on capacitor.

3. A cell according to claim 1, characterised in that the capacitor C is substantially the capacitive portion of the intrinsic input impedance of the control circuit.

4. A cell according to claim 1, 2 or 3, characterised in that the resistor Rf is substantially an added-on resistor.

5. A cell according to claim 1, 2 or 3, characterised in that the resistor Rf is substantially the resistive portion of the intrinsic input impedance of the control circuit.

6. A cell according to claim 1, 2 or 3, characterised in that the resistor Rf is substantially a leakage resistor of the capacitor.

7. A cell according to any of the previous claims, characterised in that it includes a means reducing the maximum rise and/or fall rate of the voltage at the terminals of the capacitor C when the latter is connected to the control voltage V_{com}.

8. A cell according to any of the previous claims, characterised in that the control circuit is a field effect control transistor M1 (61, 62).

9. A cell according to any of the previous claims, characterised in that the selection circuit is a field effect control transistor M2 (41, 42).

10. A cell according to claims 8 and 9, characterised in that the control circuit is a P-type field effect control transistor M1 (61, 62) connected on the one hand directly to the positive pole V_{pp} of the power supply and on the other hand through the OLED(s) to the ground of the power supply, in that the selection circuit is a P-type field effect control transistor M2 (41, 42) and in that the capacitor C and the resistor Rf in parallel return to the positive pole V_{pp}.

11. A cell according to claims 8 and 9, characterised in that the control circuit is an N-type field effect control transistor M1 (61, 62) connected on the one hand directly to the ground of the power supply and on the other hand through the OLED(s) to the positive pole V_{pp} of the power supply, in that the selection circuit is an N-type field effect control transistor M2 (41, 42) and in that the capacitor C and the resistor Rf in parallel return to the ground.

12. A cell according to any of the claims 8 to 11, characterised in that the transistors are thin-film transistors, so-called TFT.

13. An operating method of an electronic control cell for at least one organic light-emitting diode (OLED) of a pixel or segment of an active matrix display, the cell having at least :

- one control circuit (61, 62) with a control input and operating as an electronic switch relative to a control signal arriving at a control line (5, 5') on the control input and enabling to turn on the OLED(s) or not relative to said control signal,
- one capacitive storage circuit of the control signal with a capacitor C connected to the control line,
- one selection circuit (41, 42) operating as an electronic switch relative to a selection signal V_{sel} arriving at a selection line (3, 3') and enabling electrical connection or insulation of the capacitive storage circuit with/from a control voltage V_{com} relative to said selection signal,

characterised in the implementation of a cell which is according to any of the previous claims and wherein the discharge of the capacitor is caused through a resistor Rf arranged parallel to the capacitor in order to provide a temporary storage of a turned-on state,

and in that under average operating conditions the storage duration of a turned-on state is smaller than the duration of a frame and, preferably, smaller than or equal to half the duration of a frame.

14. An operating method according to claim 13, characterised in that the control signal is modulated in duration and/or in voltage level.

15. An operating method according to claim 13 or 14, characterised in that for turning the OLED(s) on, a selection pulse V_{sel} is applied to the selection line of such a duration that at the end of the selection pulse the voltage at the terminals of the capacitor is a fraction of V_{com}.

16. An operating method according to claim 13 or 14, characterised in that the control voltage Vcom is adjustable in amplitude, the conduction duration of the selection circuit (41, 42) by the selection signal being constant, in order to adjust the duration of the turned-on state so that it is smaller than the duration of the frame.

17. Display unit with organic light-emitting diodes (OLED) of pixels and/or segments implementing a set of electronic control cells of said diodes organised into a matrix, each pixel or segment being controllable individually by line x column multiplexing of the matrix, characterised in that the cells are according to any one of the claims 1 to 12 and operate according to any one of the claims 13 to 16.